

CLAIMS

1. A computer-readable conflict management program that is to be executed by a computer, the conflict management program comprising the steps of:

receiving a task execution request;

registering an active task in an active task list;

detecting for a task conflict by referencing the active task list when the task execution request is received in the execution request reception step;

determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined conditions when a task conflict is detected in the conflict detection step; and

respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined in the transition state determination step.

2. The computer-readable conflict management program according to claim 1, wherein the transition state determination step comprises:

referencing, when a task conflict is detected in

the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch; and

determining respectively the state to which the task designated by the task execution request should switch and the state to which the task registered in the active task list should switch.

3. The computer-readable conflict management program according to claim 2, wherein the active task registration step comprises:

registering the task to be executed in an execution list within the active task list; and

registering the task that should wait for execution in an execution wait list within the active task list.

4. The computer-readable conflict management program according to claim 3, wherein the active task registration step comprises:

selecting the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined in the transition state determination step;

registering the task to be executed in the execution list; and

registering the task that should wait for execution in the execution wait list.

5. The computer-readable conflict management program according to claim 2, wherein the transition state determination step comprises:

canceling the task execution request when it is determined that the task designated by the task execution request cannot be executed.

6. A storage medium for storing a computer-readable conflict management program that is to be executed by a computer and causing the computer to perform the steps of:

receiving a task execution request;
registering an active task in an active task list;
detecting for a task conflict by referencing the active task list when the task execution request is received in the execution request reception step;
determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined conditions when a task conflict is detected in the conflict detection step; and

respectively placing the task designated by the

task execution request and the task registered in the active task list in the states determined in the transition state determination step.

7. The storage medium according to claim 6, wherein the transition state determination step comprises:

referencing, when a task conflict is detected in the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch; and

determining respectively the state to which the task designated by the task execution request should switch and the state to which the task registered in the active task list should switch.

8. The storage medium according to claim 7, wherein the active task registration step comprises:

registering the task to be executed in an execution list within the active task list; and

registering the task that should wait for execution in an execution wait list within the active task list.

9. The storage medium according to claim 8, wherein the active task registration step comprises:

selecting the task to be executed and the task

that should wait for execution in accordance with the priorities of the states determined in the transition state determination step;

registering the task to be executed in the execution list; and

registering the task that should wait for execution in the execution wait list.

10. The storage medium according to claim 7, wherein the transition state determination step comprises:

canceling the task execution request when it is determined that the task designated by the task execution request cannot be executed.

11. A conflict management method comprising the steps of:

receiving a task execution request;
registering an active task in an active task list;
detecting for a task conflict by referencing the active task list when the task execution request is received in the execution request reception step;
determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined

conditions when a task conflict is detected in the conflict detection step; and

respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined in the transition state determination step.

12. The conflict management method according to claim 11, wherein the transition state determination step comprises:

referencing, when a task conflict is detected in the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch; and

determining respectively the state to which the task designated by the task execution request should switch and the state to which the task registered in the active task list should switch.

13. The conflict management method according to claim 12, wherein the active task registration step comprises:

registering the task to be executed in an execution list within the active task list; and

registering the task that should wait for execution in an execution wait list within the active

task list.

14. The conflict management method according to claim 13, wherein the active task registration step comprises:

selecting the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined in the transition state determination step;

registering the task to be executed in the execution list; and

registering the task that should wait for execution in the execution wait list.

15. The conflict management method according to claim 12, wherein the transition state determination step comprises:

canceling the task execution request when it is determined that the task designated by the task execution request cannot be executed.

16. An electronic apparatus comprising:

execution request receiver means for receiving a task execution request;

active task registration means for registering an active task in an active task list;

conflict detection means for referencing the

active task list to detect for a task conflict when the task execution request is received by the execution request receiver means;

transition state determination means for determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined conditions when a task conflict is detected by the conflict detection means; and

state transition means for respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined by the transition state determination means.

17. The electronic apparatus according to claim 16, further comprising:

a conflict condition table that stores states to which conflicting tasks should switch, wherein

when a task conflict is detected by the conflict detection means, the transition state determination means references the conflict condition table, and determines the state to which a task designated by the task execution request should switch and the state to

which a task registered in the active task list should switch.

18. The electronic apparatus according to claim 17, wherein the active task registration means registers the task to be executed in an execution list within the active task list and registers the task that should wait for execution in an execution wait list within the active task list.

19. The electronic apparatus according to claim 18, wherein the active task registration means selects the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined by the transition state determination means, registers the task to be executed in the execution list, and registers the task that should wait for execution in the execution wait list.

20. The electronic apparatus according to claim 17, wherein the transition state determination means cancels the task execution request when it is determined that the task designated by the task execution request cannot be executed.